

Ad hoc Selection in RCRARep

End-users can run their own queries in the RCRAInfo database (or elsewhere), store their selection results in RCRARep tables, and access these results within the RCRARep application.

Background

RCRARep isolates selection from reporting, and passes an “ID file” (of ID/activity_location pairs) from its selection phase to its reporting phase. Within the RCRARep application, users can save an ID file and use it in later sessions. As described here, users can also create an ID file outside the RCRARep application (using SQL*Plus or SQLLoader), then load that ID file into RCRARep tables, and use it within the RCRARep application.

Prerequisites

To create a RCRARep ID file, users need:

- normal end-user access to RCRARep (ie, RCRAInfo System Administrator must grant RCRAIread and RCRARread roles).
- the capability to do SQL within RCRAInfo (ie, be within the EPA Wide Area Network or use SecuRemote from outside the WAN; and have SQL*Net or ODBC tool).

Overview of Creating and Using an ID File

1) Make an entry in R01_ID_Desc (RCRARep’s list of ID lists) for your new ID list. Users can create their own R01_ID_Desc entries, but cannot update or delete any entries. If a user makes an erroneous entry, s/he should just make a new entry and let the erroneous one expire. (If it is essential to update/delete, RCRARep System Administrators have privileges to do this.) No one can create a list entry under someone else’s ID.

2) Insert your ID/activity_location pairs into R01_ID_List (RCRARep’s library of ID files). Users can create and add to their ID lists, but they can not update or delete them. No one can add to someone else’s list.

3) Note that ID files expire in 3 days. Contact Wendy Nye (nye.wendy@epa.gov or 617-918-1948) if you want your expiration extended or need to make an ID file permanent. Avoid creating permanent ID files that will get out of date (eg, SNCs last inspected by your office) or that would better belong in a personal spreadsheet (eg, beans in database as of a certain date).

4) Get into RCRARep, choose Complex Selection, and then, on the Basic Handler selection menu, choose to select on ID files. Note that you can use RCRARep selection menus to sub-select your ID file.

A - Example of creating a RCRARep ID list, and adding to it:

1) Make an entry in R01_ID_Desc for your new ID list:

- a) A database trigger uses a sequencer to assign a value to List_ID. In this example, the database assigned a value of numeric 2 to List_ID.
- b) Database triggers force values into Add_Date, Exp_date, U_ID, so don't bother specifying them.
- c) When offering ID lists for use, RCRARep offers only those lists whose Owner matches the geographic range of the retrieval (ie, the Region or State chosen on RCRARep's Main Menu), so make the value in Owner be the Region (01-10) or State Code that corresponds to the geographic range of your IDs.
- d) There are no constraints on the other fields. Choose a short (up to 8 characters) Name for your list and a longer Desc (description, up to 50 characters).

```
SQL> desc r01_id_desc
Name                                         Null?    Type
-----
LIST_ID                                     NOT NULL NUMBER(4)
OWNER                                       CHAR(2)
NAME                                       VARCHAR2(8)
DESCP                                       VARCHAR2(50)
ADD_DATE                                    DATE
EXP_DATE                                    DATE
U_ID                                       VARCHAR2(6)
```

```
SQL> insert into r01_id_desc
2   (owner,name,descp)
3   values
4   ('01','tst 11/9','where...');
1 row created.
```

Be sure to check what List_ID value the database assigned to your list:

```
SQL> select * from r01_id_desc;

LIST_ID OW NAME      DESCP      ADD  U_ID
----- --
2 01  tst 11/9 where... 11/  IWN
```

2) Insert your ID/activity_location pairs into R01_ID_List:

Use the List_ID value from R01-ID_Desc as List_ID when inserting into R01_ID_List. If you mistakenly put a List_ID value that someone else owns, database triggers will stop you, but if you choose a wrong List_ID value that you own, you'll add to your existing list (and will have to recreate your list). Location usually matches the start of Handler_ID, but watch your logic to be sure of this.

Sample SQL to put a specific ID/activity_location pair into R01_ID_List.

In this example, input values are specified without listing their destination fields in R01_ID_LIST. This approach requires that we specify values for fields in the order in which a DESC of R01_ID_LIST would list them. Here, LIST_ID is 2, HANDLER_ID is CTD003935905, LOCATION is CT.

```
SQL> desc r01_id_list
```

Name	Null?	Type
LIST_ID		NUMBER(4)
HANDLER_ID		VARCHAR2(12)
LOCATION		CHAR(2)

```
SQL> insert into r01_id_list
  2 values (2,'CTD003935905','CT');
1 row created.
```

```
SQL> select * from r01_id_list;
```

LIST_ID	HANDLER_ID	LO
2	CTD003935905	CT

Sample SQL to do selection and insert results into R01_ID_List:

In this example, we select some ID/activity_location pairs from a RCRAInfo table (HBASELINE_UNIVERSE) and store them in RCRARep's library of ID lists (R01_ID_LIST).

Note that the SELECT within the INSERT must list data sources for each R01_ID_LIST field. The SQL can explicitly list R01_ID_List fields (as at (1) above) or, can simply list the data sources in the same order that a DESC of R01_ID_List lists them (as in the examples here at (2)). In the insert below, the first data value selected for insertion (the digit 2) goes into LIST_ID, which is the first data field in R01_ID_List. The subsequent values go into the subsequent R01_ID_List field (HANDLER_ID and LOCATION).

SQL> desc HBaseline_universe

Name	Null?	Type
GPRA_PERMIT		CHAR(1)
GPRA_POSTCLOSURE		CHAR(1)
GPRA_CME		CHAR(1)
GPRA_CORRECTIVE_ACTION		CHAR(1)
USERID	NOT NULL	VARCHAR2(6)
NOTES		VARCHAR2(240)
HANDLER_ID	NOT NULL	CHAR(12)

SQL> insert into r01_id_list

```
2  select 2, HANDLER_ID, substr(handler_id,1,2)
3  from HBaseline_universe
4  where GPRA_PERMIT > ' ' and substr(handler_id,1,2) = 'CT';
```

21 rows created.

SQL> select * from r01_id_list;

LIST_ID	HANDLER_ID	LO
2	CTD003935905	CT
2	CT4170022020	CT
2	CT6890113792	CT
2	CTD000604488	CT
2	CTD000845982	CT
2	CTD001145341	CT
2	CTD001149277	CT
2	CTD001156009	CT
2	CTD001159730	CT
2	CTD001164599	CT
2	CTD001169010	CT
2	CTD001449511	CT
2	CTD001449826	CT
2	CTD002593887	CT
2	CTD021816889	CT
2	CTD053704110	CT
2	CTD058509712	CT
2	CTD072138969	CT
2	CTD093616613	CT
2	CTD980667927	CT
2	CTD980916779	CT
2	CTD990672081	CT

22 rows selected.

3) Exit SQL*Plus or type 'COMMIT' to make your processing take effect in the database. You can keep RCRARep open while you work in SQL*Plus, but you won't see your changes until you commit explicitly or have it done for you when you exit SQL*Plus.

B - Procedure to upload an ID file from PC into RCRARep:

Note that you can not FTP a file into RCRARep, but you can run SQL Loader to move a file from your PC/LAN into RCRARep.

1) Make an entry in R01_ID_Desc for your new ID list:

Same as at A.1 above.

2) Insert your ID/activity_location pairs into R01_ID_List

a) Find your SQL loader executable. (I searched our LAN's software tool drive (O:) with Explorer for "sqlldr?.exe" and found O:\ORAAPPS\ORAWIN8\BIN\Sqlldr80.exe).

b) Put the data you are loading in an ASCII file named "nnnnnnnn.dat" (where nnnnnnnn is any name you choose). Each row in the file must be in the format:

"####", "IIIIIIIIII", "SS"

(where #### is numeric LIST_ID with optional leading zeros, IIIIIIIIIII is a Handler ID, SS is an activity location and parentheses are optional unless your text has blanks).

c) Create a second ASCII file to control your load. Name it nnnnnnnn.CTL (where nnnnnnnn is the same as above) and put it in the same directory as nnnnnnnn.dat. It should contain the following code:

```
OPTIONS (ROWS=100,ERRORS=99999)
LOAD DATA
APPEND
INTO TABLE REGION01.R01_ID_LIST
FIELDS TERMINATED BY ',' OPTIONALLY ENCLOSED BY '"'
(
  LIST_ID,
  HANDLER_ID,
  LOCATION
)
```

Note that 'ROWS=' controls buffering (not volume of data being loaded) and 'ERRORS=99999' attempts to display many errors before aborting when your data are bad.

d) To load your data file into RCRARep's R01_ID_List: at the DOS prompt in the above directory, type:

O:\ORAAPPS\ORAWIN8\BIN\Sqlldr80.exe userid/password@rcrainf.prd nnnnnnnn

(where userid/password are your RCRAInfo ID and password and nnnnnnnn is the filename from (b) above). If you are saving or demoing this code, omit the password and let SQL prompt for it with masking.

e) In SQL*Plus or RCRARep, check that your file loaded correctly.